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A scheme for the educational planning process is outlined and described in terms of the what, when, who and how. The "how to plan" stage is broken into three steps--(1) identification and analysis of needs--self-evaluation and areas of study, (2) adaptation and implementation of plant improvement--selection and employment of specialists, preparation of educational specifications, development of preliminary architectural plans, and (3) completion and evaluation of the educational planning process--preparation of final plans and specifications, selection of furniture and equipment, completion of new facility and evaluation of the improvement program. (HH)

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U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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A DIGEST OF

prepared by the
NORTH CAROLINA DEPARTMENT OF PUBLIC INSTRUCTION
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The NEED for Educational Planning NOW

Educational planning is more than just building a new school. The total process involves evaluating the educational opportunities available, determining the changes to be made, formulating plans by which the two can be brought together, and projecting the plan of action which should be undertaken.

School facilities should be planned and designed to accommodate predetermined educational programs. To accomplish this purpose, comprehensive educational planning should be done without haste or waste.

Since responsibility for providing facilities and operating public schools in North Carolina is delegated to local boards of education, this publication, which deals entirely with planning, has been prepared as a guide for local educational planners. A board of education is a policy-making body, employing the services of an executive officer or administrator to whom it delegates responsibility and authority to operate and maintain its school system. Charged with the responsibility, the prudent administrator should take advantage of every available source of professional information to assist in making long-range recommendations to the board and in making wise day-to-day decisions.

Because some persons involved in comprehensive educational planning are going through the process for the first time, and with full realization that only a limited number of school systems have staff members trained and experienced in the process of comprehensive educational planning, the Department of Public Instruction has prepared this publication for the purpose of assisting local school officials in the development of plans for school improvement programs.

Chas. F. Carroll

STATE SUPERINTENDENT OF PUBLIC INSTRUCTION

June 1963

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WHAT is educational planning?

The term, as used in this publication, is comprehensive and includes the total planning process from the determination of educational needs to an evaluation of improvement programs.

To be complete, it should include:

- **A curriculum study**
- **A survey of facilities and program**
- **The preparation of educational specifications**
- **The selection of furniture and equipment**
- **The planning, construction, and inspection of new facilities**
- **An orientation session for the school staff**
- **An evaluation of the improvement program**

WHEN is this done?

Educational planning is a continuing process. There are several steps to be considered. Although the possibility exists that only some of these steps may be initiated at a given time, each should eventually be put to use in its logical sequence. A minimum of three years is desirable for the entire process if each step is to be thoroughly done.

WHO does this?

It involves many people—people of diversified interests, skills, and knowledges. Some of the contributing persons and their responsibilities are:

Professional Staff

- Is the center for all educational planning
- Determines educational needs
- Makes recommendations to the board of education
- Arranges the studies
- Provides the leadership

Non-teaching Staff

- Participates in studies
- Cooperates with professional staff
- Provides advice on its responsibilities

The Board of Education

- Adopts policies
- Considers recommendations
- Accepts new projects
- Represents the community
- Provides personnel, time and money for studies

Citizens of the Community

- Aid in determining the school purposes
- Assist with planning studies
- Provide the funds

Educational Consultant

- Assists with educational program planning
- Conducts educational surveys
- Assists in the preparation of educational specifications
- Interprets educational specifications to architects
- Assists with the implementation of completed projects

Architect, Engineer and Landscape Architect

- Advise the board and study committees
- Design new plants
- Supervise construction
- Inspect completed projects
- Assist with staff orientation

Attorney

- Advises the board on legal matters
- Organizes a bond redemption program
- Reviews all contracts
- Advises on voting procedures

State Department of Public Instruction Staff

- Advises on discernible trends
- Assists in planning educational programs
- Provides architectural and engineering advice
- Reviews all phases of educational planning

HOW is this done?

Step 1

Identify and analyze educational and facility needs

Step 2

Adopt and implement plant improvement program

Step 3

Complete and evaluate the educational planning process

STEP 1– IDENTIFY and ANALYZE educational and facility NEEDS

Suggested Planning Time:
One Year

This step of educational planning is a continuing process and should involve a determination of trends, objectives, and content of the total educational program to be housed.

PHASE A—SELF-EVALUATION

By Local Administration

Purpose

To determine a system-wide educational program by analyzing the needs and evaluating how well these needs are being met

Areas of Study

People Served

Study the community, its history, traditions, culture, geography, and its economy as well as possible changes.

Pupil Population

Gather and study data and endeavor to predict future population—Consider:

- **Changes in characteristics of population**
- **Migration in and out of district**
- **Presence of non-public schools**
- **Recent and future changes in district lines**
- **Changes in administrative organization**

Pupil Residence

Determine where pupils live and identify areas of increasing or decreasing population

Instructional Program

Determine the educational needs of pupils—Consider:

- **Regulatory requirements**
- **Graduates and what they do**
- **Non-graduates and their employment opportunities**
- **Vocational opportunities for youth in the community**
- **Financial ability of community to broaden the scope of the program**

Teaching Methods

Analyze the teacher qualifications and experience and identify:

- **Productive methods of teaching**
- **Discernible trends**
- **Newer teaching media**
- **Compatibility of facilities and teaching methods**
- **Ability of staff to use equipment and facilities**

Administrative Organization

Study how schools are organized and administered, to include:

- **Kinds—elementary, secondary, primary, junior high, senior high, community, union**
- **Size—minimum, optimum, maximum**
- **Administrative staff size**
- **Number of supervisory personnel**

Community Services

Study to determine relationship of schools to:

- **Public libraries**
- **Cultural activities and organizations**
- **Health programs**
- **Welfare programs**
- **Recreational programs**
- **Public entertainment**

Community Attitudes

Study possible changes regarding:

- **Nursery schools**
- **Kindergartens**
- **Special education**
- **Vocational education**
- **Adult education**
- **Higher education**

PHASE B—EDUCATIONAL SURVEY

With Professional Assistance

An educational survey is a realistic, thorough and objective appraisal of the educational program and facilities by specialists. It should:

- **Evaluate and utilize the findings of the self-evaluation**
- **Suggest ways of bringing the existing facilities and programs together with the needs**
- **Recommend a plan of action**

A Comprehensive Educational Survey Studies:

Educational Program

- **Depth and scope of the instructional program**
- **Individual needs of pupils**
- **Population trends of the school and community**
- **School organization as related to facilities**
- **Attendance centers**
- **Administration, supervision and staffing**

Transportation

- **Geographic limitations**
- **State, county, and district boundary lines**
- **Street and road systems**
- **Traffic routes**

School Plants

- Educational adequacy
- Utilization possibilities
- Site limitations
- Pupil capacity
- Characteristics of environmental location
- Adequacy of equipment
- Design flexibility

Finance

- Sources of revenue
- Relationship of effort to potential

Plan of Action

- Utilization of existing facilities
- Immediate and long-range facility needs

STEP 2– ADOPT and IMPLEMENT plant improvement PROGRAM

Suggested Planning Time: One Year

If Step 1 indicates a need for renovations or additional facilities, a plant improvement program should be initiated. The board of education should:

- Develop and establish applicable policies
- Adopt the basic standards for education
- Initiate the appropriate procedures

PHASE A—SELECTION AND EMPLOYMENT OF SPECIALISTS

The key to successful planning is the diligence with which the specialists are selected because they provide expert advice, assist in the development of wholesome relationships and counsel towards satisfactory solutions. Since the importance of qualified and experienced specialists cannot be overemphasized, time should be taken to establish qualifying criteria and clear-cut responsibilities.

Considerations for the Selection of an Architect

- **Integrity**
- **Willingness to cooperate**
- **Knowledge of design techniques**
- **Amount of school construction experience**
- **Ability to supervise construction**
- **Source of engineering service**

Responsibilities of a Legal Consultant

- **Determine the financing program**
- **Establish voting procedures and processes**
- **Conduct the sale of bonds**
- **Organize the bond redemption program**
- **Review all contracts**
- **Validate legal descriptions**

Qualifications Necessary for an Educational Consultant

- Knowledge of all phases of educational planning
- Comprehension of teaching methods
- Available as needed
- Diversified educational experience
- Sound in basic education concepts
- Capable of producing research
- Experienced in evaluating school plants
- Cognizant of the latest educational theory

PHASE B—PREPARATION OF EDUCATIONAL SPECIFICATIONS

Adequately written educational specifications provide information for the architect on the educational program to be housed and serve as a base for the development of architectural plans in preparation for the issuance of building specifications.

Good Characteristics

- Are the responsibility of the educator
- Are based on the predetermined instructional program
- Serve as a means of communication between educator and architect
- Stimulate creative thinking
- Are free of rigid prescription
- State facility and program needs and leave design methods to architect

People and Their Responsibilities

Board of Education

- Adopts permissive and guiding policies
- Authorizes the services of consultants
- Employs the specialists

Superintendent

- Designates the director of the study
- Assists in the selection of committee members
- Provides leadership, guidance and assistance to study
- Evaluates the progress
- Interprets the result to board, staff and citizens

Working Committee

- Identifies the needs, objectives and goals of the school
- Organizes the study
- Prepares a written report

Educational Consultant

- Provides guidance, resource materials and planning information
- Interprets discernible trends and new programs
- Assists in the editing of the finished specifications
- Insures balance among the areas of instruction
- Interprets the finished specifications to the design professions

Architect

- Acts in the capacity of an observer and consultant on programming
- Serves as an advisor on architectural considerations

Contents of Educational Specifications

To be effective, specifications should emphasize the kind of activity each area of instruction may expect and the spatial relationships between instructional areas. As a guide, the following information should be provided for each instructional area:

Specifications Guide

INSTRUCTIONAL PROGRAM

- **Philosophy and objectives**
- **Activities to be housed**
- **Personnel to be housed**

SPACE RELATIONSHIPS

- **Space needs**
- **Spatial relationships**

EQUIPMENT

- **Equipment to be housed**
- **Special provisions**

Estimation of Space Needs

Using the educational specifications as a guide, the number of needed classrooms should be estimated. The process should be directed towards obtaining maximum use of space and eliminating a majority of the scheduling conflicts.

Space Formula

- Number of pupils
- Number of daily class sections
- Class size
- Total number of weekly class sessions
- Per cent of utilization

PHASE C—DEVELOPMENT OF PRELIMINARY ARCHITECTURAL PLANS

Joint planning and study between the architect and the school officials is imperative. Using the educational specifications as a base, the architect should prepare interpretative preliminary studies and cost estimates. Following are some items of information to be gathered and considered prior to the beginning of any constructive design layouts:

Preliminary Studies and Drawings

Site Considerations

- Outdoor instructional programs
- Drainage
- Transportation
- Pedestrian traffic
- Utilities and services
- Conservation of natural features

Educational Specifications

- Facilities to be provided
- Spatial relationships
- Special provisions
- General considerations

Time Schedule

It is important to have a reasonable and realistic time schedule for the preparation of plans and specifications and for the construction of the project. It should include these dates:

- **Project assigned to architect**
- **Program submitted to the architect**
- **Preliminary plans to be completed**
- **Working drawings and specifications to be completed**
- **Bids to be taken**
- **Construction to begin**
- **Final inspection**

Budget

The preliminary studies and drawings should be interpretations of previous study and discussion. A soon as these drawings are completed, the architect should estimate the cost of the project. This estimate should provide the base for the development of a realistic budget.

Anticipated Costs

- **Site acquisition**
- **Site development**
- **General construction**
- **Heating and ventilating**
- **Electrical**
- **Plumbing**
- **Water supply**
- **Sewage system**
- **Equipment**
- **Fees**

PHASE D—OBTAINING PUBLIC ACCEPTANCE

A continuing, well-planned, long-range public relations program is an important part of effective leadership. Some basic concepts are:

Schools Belong to the Public

- **The public is entitled to know of future plans**
- **A complete and honest informational program should be presented**
- **The educational program is the only justification for new facilities**
- **The cooperation and assistance of individuals and community groups should be solicited**
- **Professional assistance and guidance are provided from sources outside the community**
- **Small group meetings are more effective than mass public meetings**

Use of Communicative Media

- **Open house**
- **School displays**
- **Radio and television news shorts**
- **Civic group appearances**
- **Panel discussion participation**

STEP 3– COMPLETE and EVALUATE the educational planning PROCESS

Suggested Planning Time:
One Year

The responsibility for the development of final plans and specifications, as well as, the construction and inspection of the new facilities should be placed with the design professions. An equally important phase is the utilization and evaluation of the new facility. The utilization includes the orientation of the staff to the new facility and its presentation to the public.

PHASE A– PREPARATION OF FINAL PLANS AND SPECIFICATIONS

As soon as approval of the improvement project is obtained, the final plans and specifications which are detailed and technical can be developed by the architect. Through cooperative effort, additional information should be obtained to assist in determining solutions, to eliminate misunderstandings, and to produce a durable facility, such as:

Description of Each Instructional Space

- Size and shape
- Use and control of illumination
- Utility services
- Relationships to other facilities
- Mechanical systems
- Amount and kind of fixed equipment
- Type and kind of communicative equipment
- Wall, floor and ceiling finishes
- Electrical services

General Construction Data

Architectural

- Fire rating
- Construction systems
- Doors and windows
- Finishes (general)
- Fixed equipment
- Movable equipment

Mechanical

- Heating
- Air conditioning
- Ventilating
- Plumbing

Electrical

- Electrical system
- Communication system

Submission of Bids

Final plans and specifications may be submitted to bidders after obtaining the following:

- The board of education has given formal approval of the specifications
- The State Department of Public Instruction has reviewed and the State Superintendent of Public Instruction has approved the plans
- The legal consultant has thoroughly reviewed the specifications for legal implications

PHASE B—SELECTION OF FURNITURE AND EQUIPMENT

Furniture and equipment is a vital phase of planning and an educational problem. The professional staff should thoroughly study and assist in its selection. This selection promises to make the greatest contribution to the educational utility of the new facility.

Considerations in Selection

- Compatible with the proposed educational activities
- Developed simultaneously with educational specifications
- Complete, safe, practical and economical
- Is functional
- Provides educational utility
- Has flexibility
- Is efficient
- Satisfies sense of aesthetics
- Has quality and durability

PHASE C—COMPLETION AND UTILIZATION OF NEW FACILITY

The success of any educational improvement program is dependent upon the manner in which it is completed and used. The process is not complete when the building contracts have been awarded.

Inspection and Board Acceptance

Inspection, approval and acceptance of the new facilities are integral parts of the planning process. Some suggestions to be considered are:

- **Contractor notifies architect that the project is ready for inspection**
- **The architect, the contractor and the school officials make the inspection**
- **The contractor should itemize the corrections and proceed with the changes**
- **The board of education formally accepts the project when the plans and specifications are met**
- **Final payment is withheld until acceptance by the board**

Orientation of School Staff

The effective use of a new facility may be realized if the staff is trained to use its educational features and mechanical equipment. An in-service program for the purpose of stimulating, encouraging, and educating the staff is one method of training. Such a program should involve:

- **Educational consultant**
- **Architect**
- **Engineer**
- **Representatives of equipment manufacturers**
- **Other specialists**

Presentation to the Public

Since most improvement programs are financed from local tax money, the citizens should be given an opportunity to inspect the new facilities. Effective methods of promoting citizen satisfaction are:

- **A written report**
- **A well-planned dedication program**
- **An open house**

PHASE D—EVALUATION OF THE IMPROVEMENT PROGRAM

The test of any improvement program is how well it performs. If it is doing the job as planned, pride can be taken in the effort put into the process. Such an evaluation should provide information for future planning.

Persons making the evaluation might seek answers to the following questions:

- **Is the instructional program comprehensive in depth and scope?**
- **Is the new facility meeting the educational needs of pupils?**
- **Are the instructional spaces adequate and well located?**
- **Is the school plant functional?**
- **Is the school located to serve the student population?**
- **Is the furniture and equipment performing its function?**
- **Is the staff making maximum use of the facilities?**